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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/996,189	11/28/2001	Sidney Edward Fisher	60130-1291	2239

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BIRMINGHAM, MI 48009

EXAMINER

RODRIGUEZ, PAMELA

ART UNIT	PAPER NUMBER
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3683

DATE MAILED: 04/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/996,189	<b>Applicant(s)</b> FISHER, SIDNEY EDWARD	
	<b>Examiner</b> Pam Rodriguez	<b>Art Unit</b> 3683	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 April 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-15 and 17-24 is/are pending in the application.
- 4a) Of the above claim(s) 6,9,10,13,18 and 20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5,7,8,11,12,14,15,17,19 and 21-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on February 17, 2004 has been entered.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-5, 7, 8, 11, 12, 14, 15, 17, 19, and 21-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,649,726 to Rogers, Jr. et al in view of U.S. Patent No. 6,114,821 to Kachouh.

Regarding Claim 1, Rogers, Jr. et al disclose an actuator 307 (see Figure 8) having all the features of the instant invention including: a motor 310, a cam 326 rotatable about a cam axis and drivable by the motor (see column 9 lines 28-42), a cam follower 336, an output member 372 connected to the cam follower 336 (see Figure 8),

wherein powered rotation of the cam 326 causes the cam follower 336 to be radially displaced relative to the cam axis to provide first and second output positions of the output member 372 (see column 9 lines 28-42, wherein the differing output positions of output member 372 are readable as the positions the member 372 is put through to move the member into a locked position and then an unlocked position), wherein the cam has a profile 364 that includes a radial stop 352 which in conjunction with the cam follower 336, act as a detent so that the cam follower 336 is capable of controlling a position of the cam (see column 9 lines 50-53), and wherein the motor is powered to move the output member 372 from a first output position (i.e., a locked position) to a second output position (i.e., an unlocked position) and is driven to move the output member 372 from the second output position to the first output position (i.e., motor 310 is readable as being powered to move output member 372 when the gear wheel 318 is moved by the motor in a counterclockwise direction, the locked position, and then consequently in a clockwise direction, the unlocked position, as discussed in column 9 lines 28-49).

However, Rogers, Jr. et al. '726 does not disclose that the motor is powered in a SINGLE direction to move the output member from the first output position to the second output position and is driven in the single direction to move the output member from the second output position to the first output position.

Kachouh '821 is relied upon merely for their teachings of an actuator comprising a motor 1, cam 8a/8b rotatable about a cam axis drivable by the motor, a cam follower 3/9, and an output member 4 connected to the cam follower 3/9, wherein powered

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rotation of the cam causes the cam follower to be radially displaced relative to the cam axis to provide first and second output positions I and II of the output member (i.e., a locked and an unlocked position of output member 4 as discussed in column 2 lines 55 et al.), and wherein the motor 1 is powered in a single direction to move the output member 4 from the first output position I to the second output position II and is driven in the single direction to move the output member 4 from the second output position II to the first output position I (see column 3 lines 1-38, wherein the motor turns "on" and "off" in a single direction to move the lever 4 to either the locked or unlocked position).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have substituted the motor arrangement of Kachouh '821 for the motor arrangement of Rogers, Jr. et al as an alternate means of initiating movement of the output member. Rogers, Jr. et al employs a reversible electric motor to power a gear wheel to initiate movement of the output member. However, substituting a single direction powered motor arrangement as taught by Kachouh would provide a simpler and less costly motor arrangement to initiate movement of the output member and thus simplify the overall design of the actuator assembly.

Regarding Claim 2, Rogers, Jr. et al further disclose that the radial stop 352 and the cam follower 336 act as a detent when the motor is not being powered (see column 9 line 58-column 10 line 6).

Regarding Claim 3, see column 9 lines 43-49.

Regarding Claim 4, see column 9 lines 43-53.

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Regarding Claim 5, Rogers, Jr. et al disclose that the cam 326 has a first radial stop 352 to stop the cam follower 336 at a first radius and a second radial stop (readable as a midpoint along surface 366 shown in Figure 8) to stop the cam follower 336 at a second radius, wherein the first and second radii are different (see Figure 8, wherein the radial distance from point 362 to point 352 is clearly a different radius than that of the radius between point 362 and the midpoint of surface 366).

Regarding Claim 7, see Figure 8 where multiple points 352 (readable as first stops) are shown as wells as multiple midpoints of surfaces 366 (readable as second stops) are also present.

Regarding Claim 8, Rogers, Jr. et al disclose that the cam follower 336 is biased radially outwardly relative to the cam axis via pivot pin 338.

Regarding Claim 11, see Figure 8 and the profiles of surfaces 352 and 366 as well as Claim 5.

Regarding Claim 12, see Figure 8 and the cam profile portion beginning at point 340 curving up inwardly towards point 350 and then up again towards point 352.

Regarding Claim 14, see Figure 8 and the surface 366 readable as being at least substantially radially orientated.

Regarding Claim 15, any one of the remaining stop surfaces 352 can be readable as a return stop in that they all would prevent the backward rotation of the cam 326 past those surfaces.

Regarding Claim 17, see column 9 lines 29-38 and lines 43-49.

Regarding Claim 19, see column 1 lines 4-6.

Regarding Claim 21, see Figure 8.

Regarding Claim 22, Rogers, Jr. et al., as modified, disclose most all the features of the instant invention as applied above, except for the motor being connected with the cam via a centrifugal clutch.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have constructed the motor of Rogers, Jr. et al., as modified, to be connected with the cam via a centrifugal clutch merely as an alternate means of manipulating the cam's movement. A clutch would provide an adequate means of initiating movement of the cam to thus engage with its corresponding cam follower. As long as this type of movement is initiated, the means used to perform this function are arbitrary.

Regarding Claim 23, see gear and pinion arrangement 312/318.

Regarding Claim 24, see Claim 1.

### ***Response to Arguments***

4. Applicant's arguments filed February 17, 2004 with respect to claims 1-5, 7, 8, 11, 12, 14, 15, 17, 19, and 21-24 have been considered but are moot in view of the new ground(s) of rejection.

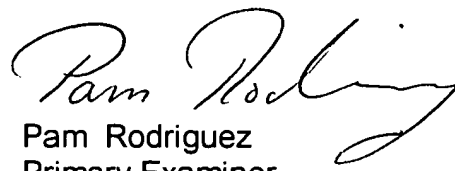
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**Conclusion**

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pam Rodriguez whose telephone number is 703-308-3657. The examiner can normally be reached on Mondays 6 am -4 pm and Tuesdays 6 am -12 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Lavinder can be reached on 703-308-3421. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Pam Rodriguez  
Primary Examiner  
Art Unit 3683  
4/12/04

PR  
04/12/2004